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10/575,201

06/05/2006

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EXAMINER

ANTHONY, JOSEPH DAVID

ART UNIT

PAPER NUMBER

1796

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11/28/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                    |  |
|------------------------------|--------------------------------------|------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/575,201 | <b>Applicant(s)</b><br>HAHN ET AL. |  |
|                              | <b>Examiner</b><br>Joseph D. Anthony | <b>Art Unit</b><br>1796            |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 11/12/08 as an RCE and amendment.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,3-7,9-10, 12 and 14-23 is/are pending in the application.
- 4a) Of the above claim(s) 14-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-7,9,10,12 and 18-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                      |                                                                   |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____                                                          | 6) <input type="checkbox"/> Other: _____                          |

***DETAILED ACTION AFTER FILING RCE***

***Claim Objections***

Claim 23 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 23 is not more limiting than claim 22 from which it directly depends.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical

Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 6-7, 9-10, 12 and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Foucht U.S. Patent Number 5,011,902.

Foucht teaches a plywood-patching composition is provided based on a non-cellular polyurethane elastomer prepared by reacting a polyether or polyester polyol with a polyisocyanate in the presence of a catalytic amount of a co-catalyst system comprising an organo-bismuth compound, preferably a bismuth salt of a carboxylic acid, and at least one organo-metallic compound, preferably a metal salt of a carboxylic acid, wherein the metal is selected from the group consisting of zinc, antimony and lithium and wherein the bismuth and metal are present in an effective mole ratio; and process for preparing same. The catalysts utilized are relatively non-toxic, yet they promote rapid polymerization with essentially no foaming for a wide variety of non-cellular

polyurethane elastomeric applications, particularly in plywood-patch applications where even small amounts of foaming are deleterious to the properties thereof. Additional componets such as surfactants and inorganic and/or organic fillers are also directly disclosed. Applicant's claims are deemed to be anticipated over the patent, see Example 2, column 3, lines 18-34, column 6, lines 44-57 and Table 1.

Claims 21-23 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Foucht U.S. Patent Number 5,011,902.

Foucht has been described above and is deemed to anticipate applicant's claims because it would have been at once envisaged to use an acetate salt zinc and a citrate salt of bismuth from the disclosure of the patent. In the alternative, it would have been obvious to use the broad disclosure of the patent to carboxylic acid metal salts as strong motivation to actually use zinc acetate and bismuth citrate. The selection of sodium disilicate is also deemed to be obvious over the disclosed of inorganic fillers.

Claims 1, 3-5, and 9-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Kobayashi et al. U.S. Patent Number 5,341,358 or Persson U.S. Patent Number 5,728,349.

Kobayashi et al. teach an optical recording medium having a layer of recording material provided on a substrate, the material having an optical property which is changed reversibly by means of light or heat, so that writing/reproducing or

writing/reproducing/erasing of information is performed by using the reversible change of the optical property of the recording material layer. The recording material is composed of a plurality of elements and is capable of taking, as a melt state thereof, a selected one of a single phase state and a two-phase coexistent state, such as Zn-Bi. An optical recording method for performing writing/reproducing/erasing of information uses a reversible change of an optical property of the recording material layer by irradiating the recording material layer with a high-power light beam so as to melt it into a single phase state and then cooling the recording material layer so as to form a phase-changed portion corresponding to a recording state or an erasing state. The recording material layer is irradiated with a low-power light beam so as to be melted into a two-phase coexistence state and then cooled so as to form a phase-changed portion corresponding to an erasing state or a recording state. Applicant's claims are deemed to be anticipated over Fig. 4, also see column 4, lines 37-44.

Persson teaches a material primarily for sport-shooting ammunition, both pellet ammunition and ball ammunition, including at least the materials zinc and bismuth. The ammunition material includes above 55 percent by weight zinc and the remainder bismuth and tin, where the amount of tin present does not exceed about 10 percent by weight tin. Applicant's claims are deemed to be anticipated over column 3, lines 25-35.

Claim 18 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kobayashi et al. U.S. Patent Number 5,341,358.

Kobayashi et al. has been described and is deemed to anticipate applicant's claimed invention. In the alternative Kobayashi et al. could be said to differ from applicant's claimed invention in that it does not seem that Fig.4 has aluminum as an additional component. In column 5, lines 11-23 and the First Example Kobayashi et al. directly teaches the further addition of aluminum as a protective heat diffusion layer material on the two-phase material (e.g. Zn-Bi). It would thus have been obvious to one having ordinary skill in the art to add an aluminum protective to a Zn-Bi material.

Claims 1, 3 and 6-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Umeda et al. U.S. Patent Application Publication No.: 2003/0052299A1 or Dumesnil et al. U.S. Patent Number 4,743,302 or Beck et al. U.S. Patent number 2,726,161.

Umeda et al. teach sintered body and high-frequency circuit component. Applicant's claims are deemed to be anticipated over the sintered bodies in Table 4 that contain in part in zinc oxide and bismuth oxide.

Dumesnil et al. teach low melting glass compositions. Applicant's claims are deemed to be anticipated over examples 1-8 that contain in part zinc oxide and bismuth oxide.

Beck et al. teach high-index glass elements. Applicant's claims are deemed to be anticipated over examples 14-18 in Table I that comprise in part zinc oxide and bismuth oxide.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dumesnil et al. U.S. Patent Number 4,743,302.

Dumesnil et al has been described above and differs from applicant's claimed invention in that there is no direct teaching (i.e. by way of an example) to a glass composition that comprise zinc oxide, bismuth oxide and an aluminum oxide. It would have been obvious to one having ordinary skill in the art to use the disclosure of example 13 wherein aluminum oxide is used in combination with zinc oxide in a glass composition, as motivation to actually add aluminum oxide as an optional component to the zinc oxide and bismuth oxide containing glass compositions directly taught by the patent.

Claims 1, 3, 6-7, 9-10, 12 and 18-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0 070 587.

EP teaches rinse aid compositions for automatic dishwashing machines that comprise surfactants, chelating agent, builders, and water-soluble salts selected from the group consisting of magnesium, zinc, tin, bismuth, titanium and mixtures thereof, see abstract, the bridging paragraph at the bottom of page 2 to the top of page 3, example 1 and claim 1. EP differs from applicant's claimed invention in that there is not a direct teaching (i.e. by way of an example) to a rinse aid composition that actually comprises both a zinc soluble salt and a bismuth soluble salt. It would have been obvious to one having ordinary skill in the art to use the direct disclosure of the reference's claim 1, as strong motivation to actually make a rinse aid composition that



comprised both a zinc soluble salt and a bismuth soluble salt. Furthermore, the courts have constantly declared that to employ two or more materials in combination for the same purpose they are taught as being individually useful is not patentable outside a shown of unexpected and superior results, see *In re Kerhoven*, 205 USPQ 1069 (CCPA 1980). The further inclusion of aluminum, as required in applicant's claim 18, is deemed to be obvious over EP in light of EP's disclosure that aluminum salts are well known optional components in rinse aid compositions, see the bridging paragraph at the bottom of page 2 to the top of page 3.

Claims 1, 3-5, 9-10, 12, and 18-20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Huot U.S. Patent Number 6,344,295.

Huot teaches rechargeable cells employing mercury- and lead-free zinc-bismuth alloys as negative active materials are provided. Such cells demonstrate low after-cycle gassing, improved cumulative discharge capacities and initial discharge performances comparable to that of rechargeable cells that employ leaded zinc powders as negative anode materials, see abstract. Applicant's claims are deemed to be anticipated over claim 13 wherein an organic surfactant is used to coat an anode which consist of a zinc-bismuth alloy. Such a combination is deemed to inherently meet all the limitations of applicant's claims. In the alternative, applicant's claims are deemed to be obvious over Huot only because Huot does not directly disclose that his surfactant surfactant coated zinc-bismuth alloy are effective composition for protecting glassware. Such is deemed

to be moot since the pending claims are composition claims and not method of use claims and as such the intended use of the composition is given little patentable weight.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 3, 6-7, 9-10 and 18-23 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3-7, 9-10, 12-13 and 18-23 of copending Application No. 10/558,211. Although the conflicting claims are not identical, they are not patentably distinct from each other because there is massive overlap in the claimed subject matter.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1, 3, 6-7, 9-10 and 18-23 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3-4, 6-8, 10 and 12-14 of copending Application No. 10/468,669. Although the conflicting claims are not identical, they are not patentably distinct from each other because there is overlap in the claimed subject matter in light of the specifications of both pending applications. See especially Table GL-1b on page 12 of 10/575,201 and the whole specification of 10/468,669 wherein the water-soluble glass compositions are disclosed to be useful in combination with detergents and other known components in rinse aids.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1, 3, 6-7, 9-10 and 18-23 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3-7, 13-14, and 16-17 of copending Application No. 10/575,219. Although the conflicting claims are not identical, they are not patentably distinct from each other because there is overlap in the claimed subject matter in light of the specifications of both pending applications. See especially Table GL-1b on page 12 of 10/575,201 and the whole specification of 10/468,669 wherein the water-soluble glass compositions are disclosed to be useful in combination with detergents and other known components in rinse aids.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Response to Arguments***

Applicant's arguments filed 11/12/08 with the RCE and the amendment have been fully considered but are not persuasive to put the application in condition for allowance for the reasons set forth above. Additional Examiner comments are set forth next. Please note the new rejections made over newly applied references Foucht U.S. Patent Number 5,011,902, Kobayashi et al. U.S. Patent Number 5,341,358 and Persson U.S. Patent Number 5,728,349.

Applicant's argues that Umeda et al. U.S. Patent Application Publication No.: 2003/0052299A1 and Dumesnil et al. U.S. Patent Number 4,743,302 and Beck et al. U.S. Patent Number 2,726,161 and Huot U.S. Patent Number 6,344,295 are patentable distinct from applicant's claimed invention because they do not literally disclose a rinse aid formulation or a detergent formulation. The Examiner want to point out that applicant's claims 1, 3-7, 9-10, and 12 contain no specifics regarding what components actually constitute a rinse aid formulation or a detergent formulation other than the required zinc and bismuth components. In any case, the compositions and metal alloys taught by the above references are especially deemed to meet any limitation to "a rinse aid formulation" since the metes and bounds of rinse aid formulations are completely undefined. Furthermore, applicant's claims 18-23 do NOT have any recitation of where the composition is a rinse aid formulation or detergent formulation, as such applicant's

arguments concerning these claims is given no patentable weight. Furthermore, there is no need for the applied prior art to actually disclose adding their compositions/alloys to dishwashers since applicant's claims are drawn to a composition and not a method of use.

In regards to applicant's arguments against the applied EP reference, the Examiner basically repeats his argument made in the previous Final Rejection which are found below.

*Applicant's arguments filed 4/2/08 with the amendment have been fully considered but are not persuasive to put the application in condition for allowance for the reasons set forth above. Additional Examiner comments are set forth next.*

*Applicant's assertion of unexpected and superior results for applicant's claimed invention over the applied reference to EP 0 070 587 are not accepted by the Examiner. The reason for this is that applicant's pending claims are nowhere commensurate in scope with applicant's showing. Applicant's Example 1 uses 0.67 g of zinc acetate, 0.19 g of bismuth citrate and 3.8 g of sodium disilicate. In the first place, applicant's independent claims 1 and 18 do not require any sodium disilicate which was used in applicant's showing. Furthermore, applicant's showing had specific concentrations and ratios of the said three components which are found nowhere in applicant's pending claims. Finally, applicant's claims are drawn to specific species of zinc and bismuth salts and not to other metal salts or alloys or elemental metals of bismuth and zinc. As such, said showing is not probative of these claimed embodiments.*

***Examiner Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Joseph D. Anthony whose telephone number is (571) 272-1117. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on (571) 272-1498. The centralized FAX machine number is (571) 273-8300. All other papers received by FAX will be treated as Official communications and cannot be immediately handled by the Examiner.

**/Joseph D. Anthony/  
Primary Patent Examiner  
Art Unit 1796  
11/22/2008**